



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,256	02/18/2004	Siegfried Seifer	SAB01 P-300	3150
277	7590	11/29/2005	EXAMINER	
PRICE HENEVELD COOPER DEWITT & LITTON, LLP 695 KENMOOR, S.E. P O BOX 2567 GRAND RAPIDS, MI 49501			LAMB, BRENDA A	
			ART UNIT	PAPER NUMBER
			1734	

DATE MAILED: 11/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/781,256

Applicant(s)

SEIFER, SIEGFRIED

Examiner

Brenda A. Lamb

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/10/2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 1734

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The originally filed specification fails to teach or suggest that the pressurized material vessel does not include any moving elements.

If applicant disagrees then he needs to provide support in the specification and/or drawings for the negative limitation that the pressurized material vessel does not include any moving elements (see MPEP 2173.05 (i)).

Claims 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear how the recitation in claim 8 that the pressure is generated by potential energy further limits the claim over claim 6 since claim 6 also recites that the pressure is generated by potential energy. The recitation in claim 7 that "the pressure is negative pressure" is confusing since in claim 6 upon which claim 7 depends recites

that "the pressure" as the pressure acting on the supply vessel is in the form of potential energy and atmospheric pressure and unclear how potential energy and atmospheric pressure can provide a negative pressure and unclear how generating both negative pressure in the supply and pressurized material vessel can facilitate refilling.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Suitor et al 2005/0045097.

Suitor et al teaches an arrangement as shown in Figure 1 for conveying a liquid comprising a material vessel 14 and a supply vessel 16 wherein the material vessel 14 and the supply vessel 16 are connected to one another by a pipe, which can be shut off by a valve 19 and wherein the liquid can be conveyed from the supply vessel 16 into the material vessel solely by exertion of pressure wherein the supply vessel is positioned above the material vessel and the liquid is conveyed from the supply vessel into the pressurized material vessel by pressure acting the deformable walls of the supply vessel in the form of potential energy and atmospheric pressure after the valve is forced

into an open position. Suitor et al material vessel reads on a pressurized material vessel in that vessel is capable of being pressurized by pressurized liquid flowing therein.

Further, Suitor et al is capable of conveying a liquid such as adhesive since it teaches every positively claimed element of the arrangement. Note it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ 2d 1647 (1987). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suitor et al 2005/0045097 in view of Hilditch et al

Suitor et al is applied for the reasons noted above. Suitor et al fails to teach that the pressurized material vessel includes a level measuring device. However, it would have been obvious to modify the Suitor et al by providing the pressurized material vessel with a level measuring device since Hilditch et al teaches providing a level measuring device in a material vessel which immerses the substrate in the liquid coating to enable one to know when to replenish the coating in the pressurized material vessel for the obvious reason to ensure a constant level of coating is available for coating the substrate (see Hilditch et al at column 5 line 51-65 and column 7 line 3-12).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over . Suitor et al 2005/0045097 in view of Hilditch et al and De Graaf et al.

Suitor et al and Hilditch et al are applied for the reasons noted above. Suitor et al fails to teach that the material vessel includes a level measuring device which is a vibrating fork level measuring device. However, it would have been obvious to given the modifications of the Suitor et al apparatus as discussed above to provide the material vessel 14 with known level measuring device such as one that includes a vibrating fork level measuring device since De Graaf et al teaches at column 7 lines 13-17 the use of level measuring device associated with a coating process.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suitor et al 2005/0045097 in view of Hilditch et al and Lockwood.

Suitor et al and Hilditch et al are applied for the reasons noted above. Suitor et al fails to teach that the material vessel includes a level measuring device which is an ultrasonic level measuring device. However, it would have been obvious to given the modifications of the Suitor et al apparatus as discussed above to provide the material vessel 14 with known level measuring device such as one that includes ultrasonic level measuring device since Lockwood teaches at column 3 lines 19-21 a conventional level measuring means associated with a coating process is an ultrasonic level measuring device.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suitor et al 2005/0045097 in view of Chambers et al.

Suitor et al is applied for the reasons noted above. Suitor et al fails to teach that coupling a second pressurized vessel to the first pressurized vessel. Chambers et al teaches coupling via pipes two coating apparatus, immersion coating tanks (10,12),

such that arranged in parallel. Chambers et al shows the coupling the immersion chambers in series with the supply source for the immersion chambers. Therefore, it would have been obvious to modify the Suitor et al by providing a second coating immersion pressurized material vessel, then couple in parallel via piping and valving the first and second coating immersion pressurized material vessels and in series with the supply vessel since Chambers et al shows doing so for the obvious advantage of enabling one to controllably fill more than one immersion vessel from a single supply source – increased productivity of the process.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suitor et al 2005/0045097 in view of Goff.

Suitor et al is applied for the reasons noted above. Suitor et al fails to teach that negative pressure is generated in the pressurized material vessel. However, it would have been obvious to modify the Suitor et al apparatus by substituting its immersion vessel or pressurized material vessel with the immersion vessel or pressurized material vessel of Goff having means for generating negative pressure therein for the obvious advantage of greater control of the process.

Claims 1, 4, 6, 8, 13 and 15-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Bradshaw 5,924,598.

Bradshaw teaches a method for conveying a liquid adhesive medium, liquid drywall mud, comprising the method steps of: conveying the liquid adhesive medium from a pressurized material vessel 57 to an applicator/dispensing device 58 and intermittently refilling the pressurized material vessel from a supply vessel 2 by exerting

negative or positive pressure; and wherein the supply vessel is larger than the pressurized material vessel as shown in Figure 1. Bradshaw teaches every positively claimed method step set forth in claim 13. With respect to claims 1, 4, 6, 8 and 15-16, Bradshaw shows in Figures 1 and 3 that the bottom of the supply vessel is positioned above the pressurized material vessel and the supply vessel has an open top.

Therefore, refilling of the pressurized material vessel of the Bradshaw process is assisted in the performance thereof by the combination of pressure potential energy and atmospheric pressure acting on the supply of adhesive in the open top supply vessel. Note applicant the claims do not exclude the use of other means for refilling the tank such as the Bradshaw's energized pump 19.

Claims 2, 7, 14 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradshaw.

Bradshaw is applied for the reasons noted above. Bradshaw teaches a method for conveying a liquid adhesive medium, liquid drywall mud, comprising the method steps of: conveying the liquid adhesive medium from a pressurized material vessel 57 to an applicator/dispensing device 58 and intermittently refilling the pressurized material vessel from a supply vessel 2 by exerting negative or positive pressure. The recitation of a negative limitation that the pressurized material vessel does not include any moving elements does not define applicant's invention over Bradshaw since, at given time period, elements included within the above vessel are not moving such as the diaphragm in the pressurized material vessel which obviously would not be moving prior to the adhesive material reaching the chamber 43 and prior to the adhesive material

from the supply vessel filling the chamber 43 with predetermined level of adhesive. Thus claim 18 is obvious over Bradshaw. With respect to claims 20-21, Bradshaw shows in Figures 1 and 3 that the bottom of the supply vessel is positioned above the pressurized material vessel and the supply vessel has an open top. Therefore, refilling of the pressurized material vessel of the Bradshaw process is assisted in the performance thereof by the combination of pressure potential energy and atmospheric pressure acting on the supply of adhesive in the open top supply vessel. Note applicant the claims do not exclude the use of other means for refilling the tank such as the Bradshaw's energized pump 19. With respect to claims 2, 7, 14 and 19, it would have been obvious that the flexing upwardly of the Bradshaw diaphragm would have generated at least temporarily a vacuum as a result of the temporary void space within chamber 43 which would have provided an additional motive force for refilling the pressurized material vessel.

Claims 5, 17 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bradshaw 5,924,598 in view of Lee.

Bradshaw is applied for the reasons noted above. Bradshaw fails to teach coupling a second pressurized vessel to the first pressurized vessel. Lee teaches conveying coating to one of the vessels which is low on coating while the other of vessels which is filled with coating is discharging coating to the applicator nozzle (see paragraph 0030 of Lee). However, it would have been obvious to modify the Bradshaw apparatus by providing a second pressurized material vessel and couple the first and second pressurized material vessel to each other and to the supply vessel and

Art Unit: 1734

applicator via piping such as shown by Lee for the taught advantage of providing a second pressurized material vessel - smoothly providing a source of coating to the applicator nozzle. Further, it would have been obvious given the modifications of the Bradshaw process and apparatus as discussed above having the supply vessel coupled to a first and second pressurized material vessel such as taught by Lee to convey the coating to one of the vessels to fill the respective vessel while the other of filled vessel is discharging coating to the taught advantage of providing a second pressurized material vessel - smoothly providing a source of coating to the applicator nozzle.

Claims 18 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Florian 5,584,416.

Florian is applied for the reasons noted above. Florian teaches a method for conveying a liquid adhesive medium comprising the method steps of: conveying the liquid adhesive medium from a pressurized material vessel 13 to an applicator/dispensing device 18 and intermittently refilling the pressurized material vessel from a supply vessel 10 by exerting positive pressure. The recitation of a negative limitation that the pressurized material vessel does not include any moving elements does not define applicant's invention over Florian since elements included within the above vessel are not moving during the process of conveying the adhesive. With respect to claim 21, Florian teaches a positive pressure via the piston which acts on the supply of the adhesive in the supply vessel wherein after a valve in a connecting pipe between the pressurized material vessel 12 and the supply vessel 10 is forced open.

Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Derian et al 5,509,954.

Derian et al teaches a method for conveying a liquid adhesive medium comprising the method steps of: conveying the liquid adhesive medium from a pressurized material vessel 30 to an applicator/dispensing device 12 and intermittently refilling the pressurized material vessel from a supply vessel 22 by exerting negative pressure. The recitation of a negative limitation that the pressurized material vessel does not include any moving elements does not define applicant's invention over Derian et al since elements included within the above vessel are not moving during the process of conveying the adhesive. Thus every element of the claimed process is taught by Derian et al.

Claims 13,14 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derian et al in view of Florian et al.

Derian et al is applied for the reasons noted above. Derian et al teaches refilling the pressurized material vessel by generating negative pressure in the pressurized material vessel. Derian et al shows a connecting pipe between the pressurized material vessel and the supply vessel. Derian et al fails to teach a valve in the connecting pipe. However, it would have been obvious to modify the Derian et al process by arranging a valve in the connecting pipe between the pressurized material vessel or degassing vessel and the supply vessel since Florian et al shows arranging a connecting pipe between the pressurized material vessel, degassing vessel, and the supply vessel for the obvious advantage of greater control of the coating process. Thus claim 19 is

Art Unit: 1734

obvious over the above cited references. With respect to claims 13-14, Derian et al teaches a method for conveying a liquid adhesive medium comprising the method steps of: conveying the liquid adhesive medium from a pressurized material vessel 30 to an applicator/dispensing device 12 and intermittently refilling the pressurized material vessel from a supply vessel 22 by exerting negative pressure. Derian et al fails to teach the supply vessel is larger than the pressurized material vessel or degassing vessel. However, it would have been prima facie obvious to modify the Derian et al by providing a supply vessel which is larger in size than the pressurized material vessel or degassing vessel for the obvious reason to handle surges in demand for the dispensed adhesive and, in any event, since Florian et al appears to show a supply vessel which is larger in diameter than the pressurized material vessel or degassing vessel. With respect to claim 14, the same rejection applied to claim 19 is applied here.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

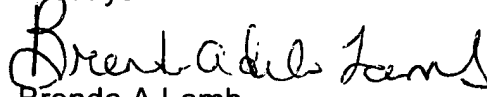
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1734

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action:

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication should be directed to Brenda A. Lamb at telephone number (571) 272-1231. The examiner can normally be reached on Monday and Wednesday thru Friday with alternate Tuesdays.


Brenda A Lamb
Examiner
Art Unit 1734